

What is claimed is:

1. A signal input device comprising:

a bottom shell, said bottom shell having a top surface;

a printed conducting track unit arranged on the top surface
5 of said bottom shell, said printed conducting track unit comprising
a plurality of contact portions; and

a top cover covering said bottom shell, said top cover
having a press unit carried in a top surface thereof, said press unit
being aimed at and spaced above said contact portions of said
10 printed conducting track unit for pressing by a user to selectively
connect said contact portions of said printed conducting track unit.

2. The signal input device as claimed in claim 1, wherein
said press unit is formed on the top surface of said top cover and
having a recessed portion in a bottom side thereof.

15 3. The signal input device as claimed in claim 1, wherein
the top surface of said bottom shell is electrically insulating.

4. The signal input device as claimed in claim 1, wherein
said press unit protrudes over the top surface of said top cover.

5. The signal input device as claimed in claim 1, further
20 comprising a plurality of conductive contacts respectively provided
on a bottom side of said press unit corresponding to and spaced
above said contact portions of said printed conducting track unit.

6. The signal input device as claimed in claim 1, further

comprising a plurality of through holes formed in said top cover and adapted to accommodate said press unit, a plurality of rubber domes supported on the top surface of said bottom shell, and a plurality of conductive contacts respectively mounted in said
5 rubber domes on a bottom side and spaced above said contact portions of said printed conducting track unit for connecting said contact portions of said printed conducting track unit selectively upon pressing of said press unit by the user.

7. The signal input device as claimed in claim 1, wherein
10 said bottom shell comprises an IC chip, said IC chip having contact pins electrically connected to said printed conducting track unit.

8. The signal input device as claimed in claim 1, wherein said bottom shell has a light emitting device mounted therein and electrically connected to said printed conducting track unit.

15 9. The signal input device as claimed in claim 1, further comprising a light guide mounted in said top cover and extending in one through hole.

10. The signal input device as claimed in claim 1, wherein said top cover comprises two bottom engagement portions disposed
20 at two sides and said bottom shell comprises two top engagement portions disposed at two sides and respectively forced into engagement with the bottom engagement portions of said top cover.

11. The signal input device as claimed in claim 10, wherein

said bottom engagement portions of said top cover are retaining grooves.

12. The signal input device as claimed in claim 10, wherein said top engagement portions of said bottom shell are retaining
5 ribs.

13. The signal input device as claimed in claim 1, wherein said bottom shell comprises a plurality of upright bonding portions respectively bonded to said top cover.

14. The signal input device as claimed in claim 1, wherein
10 said printed conducting track unit comprises a layer of conducting glue, said layer of conducting glue comprising conducting portions, said contact portions and a plurality of lead wires, an insulating layer, and a layer of conducting film, said layer of conducting glue being printed on the top surface of said bottom shell, said
15 insulating layer being printed on the top surface of said bottom shell over said lead wires beyond said conducting portions and said contact portions, and said layer of conducting film being printed on said insulating layer over said contact portions to electrically connect said contact portions.

20 15. The signal input device as claimed in claim 1, further comprising support means provided between said top cover and said bottom shell to keep said conductive contacts separated from said contact portions of said printed conducting track unit by a

distance.

16. A signal input device comprising:

a bottom shell, said bottom shell having a top surface;

a plurality of conductive contacts mounted on the top
5 surface of said bottom shell;

a top cover covering said bottom shell, said top cover
having a bottom surface and carrying a press unit; and

a printed conducting track unit located on the bottom
surface of said top cover, said printed conducting track unit
10 comprising a plurality of contact portions respectively aimed at
said press unit and separated from said press unit by a distance.

17. The signal input device as claimed in claim 16, further
comprising a support means provided between said top cover and
said bottom shell to keep said conductive contacts separated from
15 the contact portions of said printed conducting track unit by a
distance.

18. The signal input device as claimed in claim 16, wherein
said top cover has an IC chip mounted on the bottom surface
thereof and electrically connected to said printed conducting track
20 unit.

19. The signal input device as claimed in claim 16, further
comprising a light emitting device electrically connected to said
printed conducting track unit and aimed at one through hole of said

top cover.

20. The signal input device as claimed in claim 16, wherein said top cover comprises two bottom engagement portions disposed at two sides and said bottom shell comprises two top engagement
5 portions disposed at two sides and respectively forced into engagement with the bottom engagement portions of said top cover.

21. The signal input device as claimed in claim 20, wherein said bottom engagement portions of said top cover are retaining grooves.

10 22. The signal input device as claimed in claim 20, wherein said top engagement portions of said bottom shell are retaining ribs.

23. The signal input device as claimed in claim 16, wherein said bottom shell comprises a plurality of upright bonding portions
15 respectively bonded to said top cover.

24. The signal input device as claimed in claim 16, wherein said printed conducting track unit comprises a layer of conducting glue, said layer of conducting glue comprising conducting portions, said contact portions and a plurality of lead wires, an insulating
20 layer, and a layer of conducting film, said layer of conducting glue being printed on the top surface of said bottom shell, said insulating layer being printed on the top surface of said bottom shell over said lead wires beyond said conducting portions and said

contact portions, and said layer of conducting film being printed on said insulating layer over said contact portions to electrically connect said contact portions.

25. The signal input device as claimed in claim 16, wherein
5 the bottom surface of said top cover is electrically insulating.

26. A signal input device comprising:

a bottom shell, said bottom shell having a top surface;

a printed conducting track unit located on the top surface of said bottom shell, said printed conducting track unit comprising a
10 plurality of contact portions;

a top cover covering said bottom shell, said top cover carrying a press unit;

a plurality of rubber domes provided between said top cover and said bottom shell corresponding to the contact portions
15 of said printed conducting track unit; and

a plurality of conductive contacts respectively mounted in said rubber domes on a bottom side and facing the contact portions of said printed conducting track unit.

27. The signal input device as claimed in claim 26, wherein
20 said printed conducting track unit comprises a layer of conducting glue, said layer of conducting glue comprising conducting portions, said contact portions and a plurality of lead wires, an insulating layer, and a layer of conducting film, said layer of conducting glue

being printed on the top surface of said bottom shell, said insulating layer being printed on the top surface of said bottom shell over said lead wires beyond said conducting portions and said contact portions, and said layer of conducting film being printed on
5 said insulating layer over said contact portions to electrically connect said contact portions.

28. The signal input device as claimed in claim 26, wherein said bottom shell has a light emitting device bonded to the top surface thereof and electrically connected to said printed
10 conducting track unit.

29. The signal input device as claimed in claim 28, wherein said light emitting device is a light emitting diode.

30. The signal input device as claimed in claim 26, further comprising a liquid guide provided on a bottom side of said top
15 cover and extending to one through hole of said top cover.

31. The signal input device as claimed in claim 26, wherein said bottom shell has an IC chip wire installed on the top surface thereof, said IC chip having contact pins electrically connected to lead wires of said printed conducting track unit.

20 32. The signal input device as claimed in claim 26 further comprising an electric connector electrically connected to lead wires of said printed conducting track unit and inserted into one through hole of said top cover.

33. The signal input device as claimed in claim 26, wherein said top cover comprises two bottom engagement portions disposed at two sides and said bottom shell comprises two top engagement portions disposed at two sides and respectively forced into engagement with the bottom engagement portions of said top cover.

34. The signal input device as claimed in claim 33 wherein said bottom engagement portions of said top cover are retaining grooves, and said top engagement portions of said bottom shell are retaining ribs respectively engaging said retaining grooves.

35. The signal input device as claimed in claim 26, wherein said bottom shell comprises a plurality of upright bonding portions respectively bonded to said top cover.

36. The signal input device as claimed in claim 26, wherein the top surface of said bottom shell is electrically insulating.